



Complete Summary

TITLE

Diabetes mellitus: percent of spinal cord injury and disorders (SCI&D) patients with a diagnosis of diabetes mellitus having HgbA1c greater than 9 or not done during the measurement year.

SOURCE(S)

Office of Quality Performance. FY 2009, Q2 technical manual for the VHA performance measurement system. Washington (DC): Veterans Health Administration; 2009 Jan 5. various p.

Measure Domain

PRIMARY MEASURE DOMAIN

Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percent of spinal cord injury and disorders (SCI&D) patients with a diagnosis of diabetes mellitus having HgbA1c greater than 9 or not done during the measurement year.

RATIONALE

High rates of diabetes mellitus have been documented in veterans with spinal cord injury and disorders (SCI&D). Risk factors include prolonged inactivity, paralysis resulting in difficulty performing exercise, obesity, and decreased muscle mass. The primary objective of this measure is to minimize diabetic complications in this high risk population.

Prevention of Diabetic Complications:

- Heart disease is the leading cause of diabetes-related deaths. Adults with diabetes have heart disease death and stroke risk rates about 2 to 4 times higher than adults without diabetes. Blood pressure control can reduce cardiovascular disease (heart disease and stroke) by approximately 33% to 50% and can reduce microvascular disease (eye, kidney, and nerve disease) by approximately 33%. In general, for every 10 mm Hg reduction in systolic blood pressure, the risk for any complication related to diabetes is reduced by 12%. Improved control of cholesterol and lipids (for example, high-density lipoprotein [HDL], low-density lipoprotein [LDL], and triglycerides) can reduce cardiovascular complications by 20% to 50%.
- Diabetes is the leading cause of new cases of blindness among adults age 20-74 and Diabetic retinopathy causes 12,000 to 24,000 new cases of blindness each year. Detection and treatment of diabetic eye disease with laser therapy can reduce the development of severe vision loss by an estimated 50% to 60%.
- More than 60% of nontraumatic lower-limb amputations in the United States occur among people with diabetes. Comprehensive foot care programs can reduce amputation rates by 45% to 85%.
- Glucose control - Research studies in the United States and abroad have found that improved glycemic control benefits people with either type I or type II diabetes. In general, for every 1% reduction in A1c, the relative risk of developing microvascular diabetic complications (eye, kidney and nerve disease) is reduced by 40%.

PRIMARY CLINICAL COMPONENT

Diabetes mellitus; spinal cord injury and disorders (SCI&D); hemoglobin A1c (HgbA1c) testing

DENOMINATOR DESCRIPTION

Eligible spinal cord injury and disorders (SCI&D) inpatients and outpatients with diabetes mellitus, including those who have not had a hemoglobin A1c (HgbA1c) done during the measurement year (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Spinal cord injury and disorders (SCI&D) patients with a diagnosis of diabetes mellitus having hemoglobin A1c (HgbA1c) greater than 9 or not done (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

External oversight/Veterans Health Administration
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care
Hospitals
Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses
Nurses
Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Unspecified

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

See the "Rationale" field.

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

See the "Rationale" field.

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Eligible spinal cord injury and disorders (SCI&D) inpatients and outpatients with diabetes mellitus, including those who have not had a hemoglobin A1c (HgbA1c) done during the measurement year

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Eligible spinal cord injury and disorders (SCI&D) inpatients and outpatients with diabetes mellitus*, including those who have not had a hemoglobin A1c (HgbA1c) done during the measurement year

**Eligible diabetes mellitus patients:* Meets cohort selection criteria and has a diagnosis of diabetes upon Computerized Patient Record System (CPRS) chart review.Â Refer to the original measure documentation for patient cohort description.

Note: The question pertaining to level of glycemic control pertains to ALL diabetic patients, not just those who have had the test done. Therefore, if no HgbA1c was done, the patient is included in the denominator and the numerator for assumed to be out of control (e.g., greater than 9).

Exclusions

- Patients with a diagnosis of gestational diabetes
- Hyperglycemia, not otherwise specified (NOS)
- Steroid induced hyperglycemia

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter
Institutionalization

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Spinal cord injury and disorders (SCI&D) patients with a diagnosis of diabetes mellitus having hemoglobin A1c (HgbA1c)* greater than 9 or not done

**HgbA1c:* Glycosylated hemoglobin is used to measure long-range glycemic control. If more than once HgbA1c has been done in the past 12 months, the value of the most recent test is used.

Exclusions

Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Not Individual Case

OUTCOME TYPE

Clinical Outcome

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a lower score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

DM-HgbA1c greater than 9 or not done (poor control) in past year.

MEASURE COLLECTION

[Fiscal Year \(FY\) 2009: Veterans Health Administration \(VHA\) Performance Measurement System](#)

MEASURE SET NAME

[Performance Measures](#)

MEASURE SUBSET NAME

[Diabetes Mellitus \(SCI&D\)](#)

DEVELOPER

Veterans Health Administration

FUNDING SOURCE(S)

Unspecified

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

Unspecified

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Unspecified

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2009 Jan

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

Office of Quality Performance. FY 2009, Q2 technical manual for the VHA performance measurement system. Washington (DC): Veterans Health Administration; 2009 Jan 5. various p.

MEASURE AVAILABILITY

The individual measure, "DM-HgbA1c Greater Than 9 or Not Done (Poor Control) in Past Year," is published in "FY 2009, Q2 Technical Manual for the VHA Performance Measurement System."

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NQMC STATUS

This NQMC summary was completed by ECRI Institute on January 8, 2010. The information was verified by the measure developer on March 22, 2010.

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